

*Office of the Executive Officer
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November 29, 2004

California Energy Commission
Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5504

Re: Docket No. 04-IEP-01 - November 15 workshop

Dear Commissioners Geesman and Boyd:

The South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to provide written comments on the California Energy Commission (CEC) staff's proposed scope of work and other information presented at CEC's November 15, 2004 Committee Workshop on Electricity Environmental Performance Report. Our written comments are a follow-up to the oral comments provided by Mohsen Nazemi of my staff at the November 15th CEC Committee Workshop.

First I would like to thank and commend CEC Commissioners and staff for their efforts to invite and solicit AQMD's participation in development of policy issues to be analyzed and addressed in the 2005 Energy Report relating to the Environmental Performance Report of California Electrical Generation Facilities. As you know a significant portion of the California's 35,000 MW natural gas-fired and 1,000 MW waste-to-energy electrical generating facilities are located in the South Coast area. At the same time the South Coast area continues to have the worst air quality in the nation. As a result, AQMD has a keen interest to ensure that while there is adequate generation capacity to meet the California state's power demand, the air quality and public health in our area is protected through the use of clean and efficient electrical generating sources, as well as increased use of conservation and improved load management.

The AQMD supports CEC staff's efforts and approaches to gather all the data necessary to enable CEC to fully analyze and evaluate the environmental performance of California's electricity system. Further, AQMD encourages CEC to utilize such information along with other available information to formulate sound energy policies to ensure reliable and secure, as well as clean and efficient, energy supplies while protecting the air quality and public health.

However, as stated in our oral comments, AQMD has serious concerns about some of the CEC staff views and recommendations presented at the Committee Workshop. In particular we have the following concerns and comments:

1. **Air Regulations & Retrofit Rules** – The AQMD is seriously concerned about CEC staff's statement regarding whether or not air regulations and retrofit rules are "the most cost effective reductions available." CEC staff indicated that since some of the existing aged electrical generating units have low operating capacities, it is not cost effective to retrofit such units. AQMD is very concerned that although some units may not have high operating capacities, they are often operated during the peak demand periods which coincide with peak Ozone periods. As a result, their operation exacerbates the already poor air quality in our area and further impacts public health. To address this, AQMD has amended our air regulations in 2001 to temporarily remove power plants in South Coast area from our Regional Clean Air Incentives Market (RECLAIM) program and required all units to be retrofitted by installation of air pollution control equipment.
2. **Distributed Generation** – The AQMD is also concerned about CEC staff's comments regarding AQMD's use of California Air Resources Board's (CARB's) 2007 Distributed Generation (DG) standards and potential difficulties in obtaining permits for Internal Combustion (IC) Engines. AQMD supports the opportunities for additional deployment of clean renewables and DG technologies, as well as clean and more efficient central generation. However, as you know DG equipment is generally sited in closer proximity to the general population and due to lower stack heights and other release parameters can result in greater public exposures in the immediate surrounding areas. Further, based on AQMD's experience some IC Engines even with best controls still emit almost an order of magnitude more NO_x per unit of energy produced compared to new central generation or new clean DG. As a result, and based on availability of some of the new clean DG technologies, AQMD has proposed new Best Available Control Technology (BACT) requirements for new DG units. It should be pointed out that under both state and federal Clean Air Acts BACT and Lowest Available Emission Rates (LAER), respectively, achieved in practice technologies, such as those proposed by AQMD are to be applied to all new or modified sources. In addition, under state law CARB's 2007 DG standards only apply to DG equipment that does not require permits from local districts and it is inappropriate for CEC staff to indicate that AQMD should not move ahead with developing new BACT/LAER requirements for DG pending CARB's study of the final deadlines for the 2007 DG standards which again only applies to DG equipment which does not require a permit from local districts. Under both state and federal BACT and LAER new technologies' emission rates are to be required as they become achieved in practice or as they are technologically feasible and cost effective. In this case such DG technologies are presently achieved in practice. In addition, under state law CARB is required to only provide guidance to local districts on BACT for permitting of DG equipment, but state law specifically

requires districts to apply BACT on a case-by-case basis regardless of what and when CARB guidelines have provided.

3. **Green House Gases Emissions** – AQMD supports CEC's efforts to address Green House Gases (GHG) emissions from electricity power generating units. However, although as presented by CEC staff, half of the GHG emissions are from mobile sources, AQMD recommends that CEC establish policies and incentives/requirements to promote the use of combined heat and power and new GHG emission standards for power generation similar to the GHG standards recently established for mobile sources in California.
4. **Supply / Demand Projections** – AQMD is concerned that a number of new clean and efficient electrical generation facilities which have already obtained their construction permits are not being built and some existing electrical generation plants that already comply with our retrofit rules are voluntarily shutting down all due to a lack of existing and future power contracts. This is despite CEC staff's analysis and projections, as part of the 2005 Electricity Environmental Performance Report and the 2004 Updates to the Integrated Energy Policy Report approved by the CEC on November 3, 2004, which indicates serious drops in operating reserves even below 1.5% (Stage 3 Emergency) for 1-in-2 (Normal) and 1-in-10 (Hot) Summer Temperature Demands for 2005-2008. Therefore, AQMD urges CEC to develop policies and incentives to promote and encourage the establishment of reliable and secure power contracts for the cleanest and most efficient power generating units to ensure adequate supply of reserves. One example is the use of environmental dispatch which AQMD had already implemented in our program dealing with power plants in our area. This concept promotes and encourages the use of the cleanest and most efficient sources of generation first in order to provide incentives for their development.

Finally, AQMD is concerned about the implications of the above-described policies being proposed and discussed by CEC staff for the following reasons:

- Ozone levels in the South Coast area have on the average increased in the last five years.
- Although air quality has improved in 2004 in the South Coast area, this year we have had 27 and 88 days exceeding the 1-Hr and 8-Hr Ozone standards, respectively. That is on the average this year in one out of every four days we have exceeded the Ozone standards. In fact, since the exceedances have primarily occurred during the summer Ozone season, we have had exceedances of the 8-Hr Ozone standards almost everyday of this summer. In addition, this year in South Coast area we have measured the highest 8-Hr Ozone peak concentrations anywhere in the country.
- The results of the recent Children's Health Study conducted by the USC School of Medicine shows an increased percentage of children with clinically significant decrements in lung function in communities with higher pollutant levels compared to children in communities with low pollutant levels. More significantly, since the children were 18 years of age at the time of testing and at the end of their growth period, these

impacts are likely permanent. In addition, recent studies have shown that exposure to fine particulates cause significant health effects.

- Not establishing a sound and air quality and environmentally protective state-wide energy policies would be inconsistent with the California Health and Safety Code Section 25301(a) and to the Governor's goal to reduce air pollution in California by 50%.

In conclusion, AQMD is available and appreciates the opportunity to work with CEC to provide our assistance and air quality expertise in helping CEC to establish sound state-wide energy policies and planning to support California's energy demand while protecting the air quality and public health. I look forward to working with you and other CEC Commissioners and staff to provide any assistance we can. Please contact me at 909.396.3131 or Mohsen Nazemi, Assistant Deputy Executive Officer at 909.396.2662 if you have any questions.

Sincerely,

Barry R. Wallerstein, D.Env.
Assistant Deputy Executive Officer
Engineering and Compliance

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